ASBESTOS ASSES

SUBVEY

H-K Building - 25

Project Number: 0980193E

Project: G. HEILEMAN BREWERY "E"

Date Inspected: 03/27/89

Inspector: TIM SWARTZ

Building Number: 25

Building Name: FERHENTATION

SEATTLE, WASHINGTON
Building Type: BEER FERM.
Year Constructed: 1958

********* AREA NUMBER: 01	AREA DESCR	IPTIO	N: Basement-Tank Room		AREA AVERAGE	K ASBES	STOS: 41	K	******	****
	SAMPLE			M&O	UNITS OF	PIPE		REMÓVAL	REPLACEMENT	TOTAL
LOCATION OF THE MATERIAL	NUMBER	ASB	MATERIAL DESCRIPTION	CODE	QUANTITY MEASURE	10	POT PL	costs	COSTS	COSTS
along north wall	00-356408		pipe covering	OMA	28 ft. 6 in. O.D.			\$363		\$59
along south wall	00-356408		pipe covering	OMA	55 ft. 4 in. 0.D.					\$79
along south wall	00-356408		pipe covering	AHO	8 ft. 6 in. 0.D.					\$10
along north wall	00-356408		pipe covering	OHA	65 ft. 4 in. O.D.					\$9
southwest area-above air handling unit	00-356408		pipe covering	OHA	25 ft. 4 in. O.D.					\$3
Blong west wall	00-356408		pipe covering	OHA	110 ft. 4 in. O.D.					\$1,5
crawl space-in north wall-near ceiling	00-356408		pipe covering	OMA	5 ft. 4 in. 0.D.					\$
south center area-by convertor	00-356408		pipe covering	OHA	46 ft. 4 in. O.D.					\$6
NE center area-above yeast retainers	00-356408		pipe covering	OMA	16 ft. 4 in. O.D.					\$2
northeast area-by chilled water tank	00-356408		pipe covering	AHO	10 ft. 6 in. O.D.					\$2
by northeast concrete column	00-356408		pipe covering	CHA	60 ft. 4 in. O.D.					\$1
northeast area-by chilled water tank	00-356408		pipe covering	AHO	12 ft. 4 in. 0.D.		28 111			\$1
north wall-northeast area	00-356415	10%	wrapped cardboard/paper pipe	AHO	32 ft. 4 in. 0.D.	DW	28 111	\$285	\$179	\$4
north wall-northeast area	00-356415	10%	wrapped cardboard/paper pipe	OHA	3 ft. 8 in. 0.D.	DW	28 111	\$42	\$30	
center-running north & south-at ceiling	00-356415	10%	wrapped cardboard/paper pipe	AHO	20 ft. 6 in. O.D.	DW	28 [1]	\$260	\$162	. \$4
north wall-northeast area	00-356415	10%	wrapped cardboard/paper pipe	AHO	6 ft. 6 in. 0.D.	DW	28 111	\$78	\$49	\$
center-running north & south-at ceiling	00-356415	10%	wrapped cardboard/paper pipe	OHA	95 ft. 4 in. O.D.	DW	28 111	\$847	\$530	\$1,3
W center area-above yeast retainers	00-356415	10%	wrapped cardboard/paper pipe	OHA	48 ft. 4 in. O.D.	DW	28 111	\$428	\$268	Š
along north & west walls	02-356404	0%	mjp on non-suspect pipe cover	AMO	15 4 in. O.D.	DW		İ		
	02-356405	0%						· ·		
	02-356406	0%						1		
siong north wall	03-356409	60%	mjp on pipe covering	OMA	13 6 in. 0.0.	HPS/R	28 111	\$503	\$295	\$
crawl space-in north wall-near ceiling	03-356409	60%	mjp on pipe covering	OHA	1 4 in. 0.D.	HPS/R	28 111	\$28	\$16	
southwest area-above air handling unit	03-356409	60%	mjp on pipe covering	OMA	3 4 in. O.D.		28 111	\$84	\$47	\$
along north wall	03-356409		mjp on pipe covering	OMA	16 4 in. O.D.		28 111			•
along south wall	03-356409	60%	mjp on pipe covering	OHA	4 6 in. O.D.		28 111			•
long south wall	03-356409	60%	mjp on pipe covering	AMO	20 4 in. O.D.		28 111			•
along west wall	03-356409	60%	mjp on pipe covering	OHA	6 4 in. 0.D.		28 111			\$
by northeast concrete column	03-356409	60%	mjp on pipe covering	OHA	2 4 in. 0.D.		28 111			•
E center area-above yeast retainers	03-356409		mjp on pipe covering	OMA	3 4 in. 0.D.		28 111			4
northeast area-by chilled water tank	03-356409	60%	mjp on pipe covering	OMA	2 6 in. O.D.		28 111			•
northeast area-by chilled water tank	03-356409		mjp on pipe covering	OHA	3 4 in. 0.D.	HPS/R				•
outh center area-by convertor	03-356409	60%	mjp on pipe covering	OMA	14 4 in. O.D.	HPS/R				•
•	03-356410	40%	my on pipe section.	J. 11.	14 4 111. 0.0.	111 3/1	28 111		,	•
	03-356411	,50X	1 .		•		28 111			
outh center area-convertor tank-by AHU	04-356412	50%	boiler/tank insulation	ОМВ	11 sq.ft.		28 111		\$249	
The second secon	04-356413	50%	Tarital time time toll	OTE	11 sq.11.				• → ∠49	;
	04-356414	50%					28 [1]			
north wall-northeast area	05-356416						28 111			
			mip on wrapped cardboard/paper		2 8 in. 0.D.	DW	28 111			1
center-running north & south-at ceiling	05-356416		mjp on wrapped cardboard/paper		10 6 in. O.D.	DW	28 111			\$
north wall-northeast area	05-356416	40%	mip on wrapped cardboard/paper	OHA	12 4 fn. O.D.	DW	28 111	\$337	7 \$187	\$

HALL-KIMBRELL ENVIRONMENTAL INC.

Page 54

ASBESTOS ASSEL

SURVEY

H-K Building x- 25

Project Number: 0980193E

Project: G. HEILEMAN BREWERY "E"

Date Inspected: 03/27/89

Inspector: TIM SWARTZ

Building Number: 25

Building Name: FERNENTATION

SEATTLE, WASHINGTON

Building Type: BEER FERM. Year Constructed: 1958

						:					
٦	north wall-northeast area	05-356416	40%	mjp on wrapped cardboard/paper	OHA	3 6 in. O.D.	DW	28 111	\$116	\$68	\$184
1	center-running north & south-at ceiling	05-356416	40X	mjp on wrapped cardboard/paper	OHA	15 4 in. O.D.	DW	28 111	\$421	\$234	\$655
1	NW center area-above yeast retainers	05-356416	40%	wrapped cardboard/paper pipe	OHA	16 ft. 4 in. O.D.	DW	28 111	\$143	\$89	\$232
		05-356417	50%			•		28 111			1
	•	05-356418	50%					28 111			ł
	SE area-above refrigeration tanks	06-356419	20%	mjp on non-suspect pipe cover	OHA	6 4 in. O.D.	DR	28 111	\$169	\$94	\$263
		06-356420	50%					28 111			ł
		06-356421	50%	1				28 111			ł
		10 330,0,	50.7								í

AREA COMMENTS

AREA # 01 TOTAL \$10,230 \$6,210 \$16,440

The materials are in fair to good condition with minor contact and water damage. The materials are approximately 1' to 16' from the floor. At a minimum, it is recommended that the materials be repaired and monitored. If removal is planned, extensive gross removal procedures are recommended. This appears to be a high traffic area.

******* AREA NUMBER: 02	AREA. DESCR	IPT10	N: Basement		AREA AVER	AGE X ASBI	estos	: 3	ζ	*****	****
LOCATION OF THE MATERIAL	SAMPLE NUMBER	ASB	MATERIAL DESCRIPTION	O&H CODE	UNITS OF QUANTITY MEASURE	PIPE ID			REHOVAL COSTS	REPLACEMENT COSTS	TOTAL COSTS
tank room-running N & S-at center of rm east of elevator tank room-SE area-above ammonia tanks	07-356422 07-356422 07-356422 07-356423 07-356424	2%	cork pipe covering cork pipe covering cork pipe covering	OHA OHA OHA	25 ft. 8 in. (10 ft. 12 in. 30 ft. 8 in. (O.D RS/R	12 12 12	IV IV IV	\$354 \$220 \$424	\$253 \$169 \$303	\$607 \$389 \$727
AREA COMMENTS						AREA # 0	2 TO	TAL	\$998	\$725	\$1,72

The material is in good condition with minor contact and water damage. The material is approximately 10' from the floor. At a minimum, it is recommended that the material be repaired and monitored. If removal is planned, glove bag removal procedures are recommended. This appears to be a high traffic area.

******* AREA NUMBER: 03	AREA DESCRIPTIO	N: 1st Floor-Above Permanent Cei	ling	AREA AVERAGE	X ASBE	STOS: 28	3X	*****	***
LOCATION OF THE MATERIAL	SAMPLE NUMBER ASB	MATERIAL DESCRIPTION	O&M CODE	UNITS OF QUANTITY HEASURE	PIPE ID	EXP POT PL	REHOVAL COSTS	REPLACEMENT COSTS	TOTAL COSTS
restroom restroom restroom restroom restroom	00-356400 10% 00-356407 50% 01-356401 40%	wrapped cardboard/paper pipe wrapped cardboard/paper pipe pipe covering mjp on wrapped cardboard/paper mjp on wrapped cardboard/paper		7 ft. 4 in. 0.0. 7 ft. 8 in. 0.D. 7 ft. 6 in. 0.D. 1 4 in. 0.D. 2 8 in. 0.D.	DW	17 IV 17 IV 17 IV 17 IV 17 IV 17 IV	\$9 \$9 \$2 \$9	\$71 1 \$57 3 \$16	\$101 \$170 \$144 \$44 \$15:

HALL-KIMBRELL ENVIRONMENTAL INC.

Page 55

ASBESTOS ASSES

SURVEY

H-K Building *----25

Project Number: 0980193E

Project: G. HEILEMAN BREWERY "E"

Date Inspected: 03/27/89 Inspector: TIM SWARTZ Building Number: 25

Building Name: FERMENTATION

SEATTLE, WASHINGTON

Building Type: BEER FERM. Year Constructed: 1958

01-356403 40X 17 IV

AREA COMMENTS

AREA # 03 TOTAL \$376 \$240 \$616

The materials are in good condition with minor contact and water damage. The materials are approximately 1' to 7' from the floor. At a minimum, it is recommended that the materials be repaired and monitored. If removal is planned, localized glove bag removal procedures are recommended. This appears to be a low traffic area.

******** AREA NUMBER: 04 AREA DESCRIPTION: 2nd Floor-Above Permanent Ceiling AREA AVERAGE % ASBESTOS: 22%

LOCATION OF THE MATERIAL	SAMPLE NUMBER	ASB	MATERIAL DESCRIPTION	O&M CODE	UNITS OF QUANTITY MEASURE	PIPE ID	EXP POT	PL	REHOVAL COSTS	REPLACEMENT COSTS	TOTAL
restroom restroom restroom restroom restroom	00-356425 00-356425 00-356429 08-356426 08-356426 08-356427 08-356428	10% 35% 35%	wrapped cardboard/paper pipe wrapped cardboard/paper pipe pipe covering mjp on wrapped cardboard/paper mjp on wrapped cardboard/paper		20 ft. 4 in. 0.D. 7 ft. 8 in. 0.D. 7 ft. 6 in. 0.D. 3 8 in. 0.D. 7 4 in. 0.D.	DW	17 17 17	IV IV IV	\$178 \$99 \$91 \$144 \$197	\$112 \$71 \$57 \$85 \$109	\$290 \$170 \$148 \$229 \$306

AREA COMMENTS

AREA # 04 TOTAL \$709 \$434 \$1,143

The materials are in good condition with minor contact and water damage. The materials are approximately 1' to 7' from the floor. At a minimum, it is recommended that the materials be repaired and monitored. If removal is planned, localized glove bag removal procedures are recommended. This appears to be a low traffic area.

******** AREA NUMBER: 05 AREA DESCRIPTION: 3rd floor-Above Permanent Ceiling AREA AVERAGE % ASBESTOS: 22%

LOCATION OF THE MATERIAL	SAMPLE NUMBER	ASB	MATERIAL DESCRIPTION	O&M CODE	UNITS OF QUANTITY HEASURE	PIPE ID	EXP POT	PL	REMOVAL COSTS	REPLACEMENT COSTS	TOTAL COSTS
restroom restroom restroom restroom restroom	00-356430 00-356430 00-356434 09-356431 09-356431 09-356432 09-356433	10% 35% 33%	wrapped cardboard/paper pipe wrapped cardboard/paper pipe pipe covering mip on wrapped cardboard/paper mip on wrapped cardboard/paper		20 ft. 4 in. 0.0. 7 ft. 8 in. 0.0. 7 ft. 6 in. 0.0. 7 ft. 6 in. 0.0. 7 4 in. 0.0. 3 8 in. 0.0.	DW	17 17 17 17	١٧	\$178 \$99 \$91 \$197 \$144	\$112 \$71 \$57 \$109 \$85	\$290 \$170 \$148 \$306 \$229

HALL-KIMBRELL ENVIRONMENTAL INC.

Page 56

ASBESTOS ASSE.

SURVEY

H-K Building25

Project Number: 0980193E

Project: G. HEILEMAN BREWERY "E"

Date Inspected: 03/27/89 Inspector: TIM SWARTZ Building Number: 25

Building Name: FERMENTATION

SEATTLE, WASHINGTON

Building Type: BEER FERM.

Year Constructed: 1958

AREA COMMENTS

AREA # 05 TOTAL \$709 \$434 \$1,143

The materials are in good condition with minor contact and water damage. The materials are approximately 1' to 10' from the floor. At a minimum, it is recommended that the materials be maintained and monitored. If removal is planned, glove bag removal procedures are recommended. This appears to be a low traffic area.

******** AREA NUMBER: 06 AREA DESCRIPTION: 4th floor-Above Permanent Celling AREA AVERAGE % ASBESTOS: 33%

LOCATION OF THE MATERIAL	SAMPLE Number	ASB	MATERIAL DESCRIPTION	O&M CODE	UNITS OF QUANTITY MEASURE	PIPE ID	EXP POT	PL	REMOVAL COSTS	REPLACEMENT COSTS	TOTAL COSTS
anitor's closet	00-356435	10%	wrapped cardboard/paper pipe	OHA	18 ft, 4 in. 0.D.	. DW	18	IV	\$161	\$100	\$261
janitor's closet	00-356435	10%	wrapped cardboard/paper pipe	AMO	8 ft. 8 in. 0.D.	. DW	18	17	\$113	\$81	\$194
janitor's closet	00-356439		pipe covering	OHA	10 ft. 4 in. 0.D	HPS/R	18	IV	\$89	\$56	\$145
janitor's closet	00-356439	50%	pipe covering	OHA	55 ft. 6 in. 0.D.	. HPS/R	18	14	\$714	\$446	\$1,160
Janitor's closet	10-356436	20%	mjp on wrapped cardboard/paper	OHA	6 4 in. O.D.	DW	18	١٧	\$169	\$94	\$263
janitor's closet	10-356436		lmip on wrapped cardboard/paper		3 8 in. O.D.	DW	18	١٧	\$144	\$85	\$229
	10-356437	30%	1 "				18	IV	ł	•	
	10-356438	30%	1				18	I۷			
janitor's closet	11-356440	50%	mjp on pipe covering	AHO	5 4 in. O.D.	HPS/R	18	IV	\$140	\$78	\$218
janitor's closet	11-356440	. 50%	mjp on pipe covering	OHA	21 6 in. O.D.	HPS/R	18	I۷	\$812	\$477	\$1,289
	11-356441	50%	1				18	IV '	i		•
	11-356442	50%	1				18	IV	1		

AREA COMMENTS

AREA # 06 TOTAL \$2,342 \$1,417 \$3,759

The materials are in fair condition with localized contact and water damage. The materials are approximately 1' to 7' from the floor. At a minimum, it is recommended that the materials be repaired and monitored. If removal is planned, localized glove bag removal procedures are recommended. This appears to be a low traffic area.

LOCATION OF THE MATERIAL	SAMPLE NUMBER /	ASB	MATERIAL DESCRIPTION	O&M CODE	YTITHAUD	UNITS OF MEASURE	PIPE		PL		REPLACEMENT COSTS	TOTAL COSTS
janitor's closet	12-356444	60% 70% 55%	debris	OMF	6 s	q.ft.		110 110 110	1	\$100	\$0	\$100

HALL-KIMBRELL ENVIRONMENTAL INC.

Page 57

ASBESTOS ASSE.

H-K Building45

Project Number: 0980193E

Project: G. HEILEMAN BREWERY "E"

Date Inspected: 03/27/89 Inspector: TIM SWARTZ Building Number: 25

Building Name: FERHENTATION

SEATTLE, WASHINGTON

Building Type: BEER FERM. Year Constructed: 1958

AREA COMMENTS

AREA # 07 TOTAL \$100 \$0 \$100

This debris is magnesia pipe covering found on the floor of this area. At a minimum, it is recommended that the debris be removed. If removal is planned, gross removal procedures are recommended. This appears to be a low traffic area.

****** ****** AREA NUMBER: 08 AREA DESCRIPTION: 5th Floor-Hot Wort Tank Room AREA AVERAGE % ASBESTOS: 35%

LOCATION OF THE MATERIAL	SAMPLE NUMBER	ASB	MATERIAL DESCRIPTION	O&H CODE	UNITS OF QUANTITY MEASURE	PIPE 1D	_	PL	REMOVAL COSTS	REPLACEMENT COSTS	TOTAL COSTS
north wall-near floor north wall-near floor north wall-near floor	00-356446 00-356447 13-356448 13-356449 13-356450	30%	pipe covering pipe covering mjp on pipe covering	OHA OHA OHA	4 ft. 4 in. 0.D 4 ft. 4 in. 0.D 2 4 in. 0.D.		24 24 24 24 24	111 111 111	\$36 \$56	\$22 \$22 \$31	\$58 \$58 \$87

AREA COMMENTS

AREA # 08 TOTAL \$128 \$75 \$203

The materials are in good condition with minor contact damage. The materials are up to 4' from the floor. At a minimum, it is recommended that the materials be repaired and monitored. If removal is planned, localized glove bag removal procedures are recommended. This appears to be a low traffic area.

****** AREA NUMBER: 09 AREA DESCRIPTION: Basement ***** AREA AVERAGE % ASBESTOS: 30%

LOCATION OF THE MATERIAL	SAMPLE NUMBER	ASB	MATERIAL DESCRIPTION	O&M CODE	UNITS OF QUANTITY MEASURE	PIPE ID	EXP POT PL	REHOVAL COSTS	REPLACEMENT COSTS	TOTAL COSTS
area east of elevator	00-356408	60%	pipe covering	OHA	18 ft. 4 in. 0.0	. HPS/R	25 111	\$161	\$100	\$261
area east of elevator	00-356415	10%	wrapped cardboard/paper pipe	AHO	18 ft. 8 in. 0.0	. DW	25 111	\$255	\$182	\$437
area east of elevator	00-356415	10%	wrapped cardboard/paper pipe	ONA	8 ft. 6 in. 0.0	. DW	25 111	\$104	\$65	\$169
area east of elevator	00-356415	10%	wrapped cardboard/paper pipe	OHA	25 ft. 4 in. 0.1	. DW	25 111	\$223	\$139	- \$362
E of elevator-SE corner-above HW heater	00-356737	50%	pipe covering	OMA	8 ft. 4 in. 0.0	. DW	25 111		\$45	\$116
area east of elevator	02-356404	0%	mjp on non-suspect pipe cover	AHO	4 4 in. O.D.	DW				
	02-356405 02-356406	,0%								
area east of elevator	03-356409 03-356410	60% 40%	mjp on pipe covering	OHA	8 4 in. 0.D.	HPS/R	25 III 25 III		\$125	\$350
	03-356411	50%					25 111	l		
area east of elevator	05-356416	40%	mjp on wrapped cardboard/paper	AMO	6 8 in. 0.p.	DU	25 111		\$170	\$459
area east of elevator	05-356416		mjp on wrapped cardboard/paper		8 4 in. O.D.	DW	25 111			\$350
area east of elevator	05-356416 05-356417		mjp on wrapped cardboard/paper		7 6 in. O.D.	DW	25 111 25 111	\$271	\$159	\$430

HALL-KIMBRELL ENVIRONMENTAL INC.

Page 58

ASBESTOS ASSES

BURVEY

H-K Building *--25

Project Number: 0980193E

Project: G. HEILEMAN BREWERY "E"

Date Inspected: 03/27/89 Inspector: TIM SWARTZ Building Number: 25

Building Name: FERNENTATION

SEATTLE, WASHINGTON

Building Type: BEER FERM. Year Constructed: 1958

05-356418 50% 25 111

AREA COMMENTS

AREA # 09 TOTAL \$1,824 \$1,110 \$2,934

The materials are in good condition with minor contact damage. The materials are approximately 5' to 12' from the floor. At a minimum, it is recommended that the materials be repaired and monitored. If removal is planned, gross removal procedures are recommended. This appears to be a high traffic area.

******* AREA NUMBER: 10 AREA DESCRIPTION: Stairwells AREA AVERAGE % ASBESTOS: 20%

LOCATION OF THE MATERIAL	SAMPLE NUMBER	ASB	MATERIAL DESCRIPTION	CODE	UNITS OF GUANTITY MEASURE	PIPE ID	EXP POT PL	REMOVAL COSTS	REPLACEMENT COSTS	TOTAL COSTS
2nd floor	00-356425	10%	wrapped cardboard/paper pipe	OHA	12 ft. 4 in. O.D.	DW	25 111	\$107	\$67	\$17
3rd floor	00-356430		wrapped cardboard/paper pipe	AHO	12 ft. 4 in. 0.D.	DW	25 111	\$107	\$67	\$17
4th floor	00-356435	10%	wrapped cardboard/paper pipe	AHO	12 ft. 4 in. 0.D.	DW	25 111	\$107	\$67	\$17
2nd floor	08-356426	35%	mjp on wrapped cardboard/paper	AMO	1 4 in. O.D.	DW	25 111	\$28	\$16	\$4
	08-356427	32%	, , , , , , , , , , , , , , , , , , , ,				25 111	ł		
	08-356428	30%	1.			•	25 111]		
3rd floor	09-356431	33%	[m]p on wrapped cardboard/paper	AHO	1 4 in. O.D.	DW	25 111	\$28	\$16	\$4
	09-356432	20%	1				25 111	1		
	09-356433	40%	1 .				25 111			
4th floor	10-356436	20%	mjp on wrapped cardboard/paper	AMO	1 4 in. O.D.	DW	25 111	\$28	\$16	\$4
	10-356437	30%	1				25 111	J		
	10-356438	30%					25 111			

AREA COMMENTS

AREA # 10 TOTAL \$405 \$249 \$654

The materials are in good condition with minor contact damage. The materials are approximately 6' to 16' from the floor. At a minimum, it is recommended that the materials be repaired and monitored. If removal is planned, localized glove bag removal procedures are recommended. This appears to be a high traffic area.

BUILDING # 25 TOTAL \$17,821 \$10,894 \$28,715

HALL-KIMBRELL ENVIRONMENTAL INC.

Page 59